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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,632	06/24/2003	Atsushi Okuyama	500.42806X00	1458

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EXAMINER

PATEL, HETUL B

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,632

Applicant(s)

OKUYAMA ET AL.

Examiner

Hetul Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 06/24/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-8 are presented for examination.
2. The IDS filed on 06/24/2003 has been received and carefully considered.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "ACCESS CONTROL SYSTEM FOR CONTROLLING ACCESS OF HOST TO STORAGE BASED ON THE PHYSICAL CHARACTERISTICS OF THE STORAGE".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art, Igari (JP 2001-256004 A) in view of Stebbings (USPN: 6,636,689).

As per claim 1, Igari teaches an information recording/reproducing system, comprising a magnetic disk apparatus (HDD 1 in Fig. 1) for recording/reproducing

information and a host system (200 in Fig. 1) to which said magnetic disk apparatus can removably be connected and which makes access to said magnetic disk apparatus for recording/reproduction of the information, wherein said magnetic disk apparatus includes authentication key generating means for generating an authentication key (the second authentication data) (e.g. see paragraph [0018] and Fig. 1). However, Igari does not teach that the authentication key is generated on the basis of physical characteristic of said magnetic disk apparatus itself. Stebbings, on the other hand, teaches that the authentication key is generated on the basis of physical characteristic of said magnetic disk (i.e. the data disk) apparatus itself (e.g. see the abstract and Col.13, lines 6-12). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the current invention was made to implement Stebbings' teachings in the system taught by Igari so it would prevent unauthorized users from accessing from the host to the magnetic disk data. Another disc having the same modulation characteristics is required in order for it to be considered an authenticated disk.

As per claim 2, the combination of Igari and Stebbings teaches the claimed invention as described above and furthermore, Igari teaches that said magnetic disk apparatus (HDD 1 in Fig. 1) and said host system (200 in Fig. 1) include authentication key recording means for recording said authentication key (the second authentication data), respectively, authentication data generating means for generating authentication data on the basis of said authentication key, respectively, and at least one access control means for controlling access of said host system to information of said magnetic

disk apparatus on the basis of the authentication data of said magnetic disk apparatus (e.g. see paragraphs [0018] and [0028]).

As per claim 4, the combination of Igari and Stebbings teaches the claimed invention as described above. According to the definition, the term "eccentric" means "departing from a recognized" or "differing from the normal". Igari teaches that said authentication key is generated on the basis of eccentricity characteristic (i.e. the time information when creating the first authentication data) of a magnetic disk which said magnetic disk apparatus includes (e.g. see paragraph [0028]).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Igari in view of Stebbings, further in view of Noble (USPN: 6,782,458).

As per claim 3, the combination of Igari and Stebbings teaches the claimed invention as described above. However, both Igari and Stebbings failed to teach the further limitation of generating the authentication key on the basis of medium defect characteristic of a magnetic disk which said magnetic disk apparatus includes. Noble, on the other hand, teaches about protecting the copy-protected data within the storage device from unauthorized user access by authenticating the access to read and write the data stored on the storage device based on the medium defect list of the storage device (e.g. see the abstract). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the current invention was made to implement the teachings of Noble in the system taught by the combination of Igari and Stebbings. In

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doing so, it would prevent unauthorized users from accessing the magnetic disk data.

Therefore, it is being advantageous.

Allowable Subject Matter

6. Claims 5-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hetul Patel whose telephone number is 571-272-4184.

The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MATTHEW D. ANDERSON
PRIMARY EXAMINER